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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,093	01/07/2004	Susan M. Barnabo	PCC123	2751
32047	7590	06/16/2006	EXAMINER	
GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC 55 SOUTH COMMERICAL STREET MANCHESTER, NH 03101			SCHINDLER, DAVID M	
			ART UNIT	PAPER NUMBER
			2862	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H/A

Office Action Summary	Application No.		Applicant(s)	
	10/753,093		BARNABO ET AL.	
	Examiner		Art Unit	
	David Schindler		2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8, 11-14 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8, 11-14 and 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the communication filed 3/29/2006.

Allowable Subject Matter

2. Upon further consideration, the allowance of claims 3-8, 11-14, and 17-19 is withdrawn in favor of the rejections found below.

Claim Objections

3. Claim 11 is objected to because of the following informalities:

The use of the phrase "a first of said movable rail and said stationary rail" on line 4 and the phrase "said second of said movable rail and said station rail" on line 7 is unclear.

The phrase "said second of said movable rail and said station rail" on line 7 lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 2-8, 11-14, and 17-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one

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skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to Claims 2-8, 11-14, and 17-19,

Claim 3 recites "said activating member not extending between said magnet and said magnetic field sensor in either of said first and said second position" on the last three lines. However, it does appear that the activating member, while for example being below the magnet and the sensor (see figure 6A), does appear to be between the magnet and the sensor.

Independent claims 6, 7, 11, and 18 contain similar issues.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "said activating member" on for example line 6 on claim 3 lacks antecedent basis.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. (herein referred to as "Becker") (6,095,555) in view of Birnbaum (4,236,903).

As to Claim 3,

Becker discloses a sensor assembly (combination of (70) and (72)) including at least one magnet (72), the magnet disposed adjacent a magnetic field sensor ((70) / hall), and an activating member (48), the sensor assembly (combination of (70) and (72)) is mounted to a rail of an automobile seat rail system, and the magnetic field sensor providing a first output when the activating member is in a first position relative to the sensor assembly and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the magnet and the magnetic field sensor in either of the first and the second position ((Figures 2-5) and (Column 3, Lines 65-67) and (Column 4, Lines 1-54)).

Becker does not disclose a sensor assembly including at least one magnet having a C-shaped cross-section.

Birnbaum discloses a sensor assembly including at least one magnet having a C-shaped cross-section (Figure 5), the magnet disposed adjacent a magnetic field sensor (228), the sensor assembly mounted to a rail (Figure 5), an activating member ((202) and (202')), the magnetic field sensor providing a first output when the activating member is in a first position relative to the sensor assembly, and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the magnet and the magnetic field sensor in either of the first and the second position ((Figure 5) and (Column 9, Lines 19-67) and (Column 10, Lines 1-16) and (Column 11, Lines 33-67) and (Column 12, Lines 1-2)).

It would have been obvious to a person of ordinary skill in the art to modify Becker to include a sensor assembly including at least one magnet having a C-shaped cross-section given the above disclosure and teaching of Birnbaum in order to provide a new and improved detector which is simplified and economical (Column 2, Lines 58-60) and to be able to provide signal indicative of velocity (Column 12, Lines 7-10).

As to Claim 2,

Becker discloses the magnetic field sensor comprises a Hall sensor (70) (Column 4, Line 55).

As to Claim 4,

Becker does not disclose the sensor assembly is mounted directly to the rail.

Birnbaum discloses the sensor assembly is mounted directly to the rail (Figure 5).

It would have been obvious to a person of ordinary skill in the art to modify Becker to include the sensor assembly is mounted directly to the rail given the above disclosure and teaching of Birnbaum in order to reduce cost by reducing the number of parts needed to mount the sensor assembly.

As to Claim 5,

Becker discloses the sensor assembly (combination of (70) and (72)) is mounted to the rail ((32) / T-shaped guide member) via a bracket (34) ((Figure 2) and (Column 2, Lines 48-53) and (Column 3, Lines 41-46)).

As to Claim 6,

Becker discloses a sensor assembly (combination of (70) and (72)) including at least one magnet (72), the magnet disposed adjacent a magnetic field sensor ((70) / hall), and an activating member (48), the activating member being a rail of an automobile seat rail system (Figures 2-5), the magnetic field sensor providing a first output when the activating member is in a first position relative to the sensor assembly and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the magnet and the magnetic field sensor in either of the first and the second position ((Figures 2-5) and (Column 3, Lines 65-67) and (Column 4, Lines 1-54)).

Becker does not disclose a sensor assembly including at least one magnet having a C-shaped cross-section.

Birnbaum discloses a sensor assembly including at least one magnet having a C-shaped cross-section (Figure 5), the magnet disposed adjacent a magnetic field sensor

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(228), the sensor assembly mounted to a rail (Figure 5), an activating member ((202) and (202')), the magnetic field sensor providing a first output when the activating member is in a first position relative to the sensor assembly, and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the magnet and the magnetic field sensor in either of the first and the second position ((Figure 5) and (Column 9, Lines 19-67) and (Column 10, Lines 1-16) and (Column 11, Lines 33-67) and (Column 12, Lines 1-2)).

It would have been obvious to a person of ordinary skill in the art to modify Becker to include a sensor assembly including at least one magnet having a C-shaped cross-section given the above disclosure and teaching of Birnbaum in order to provide a new and improved detector which is simplified and economical (Column 2, Lines 58-60) and to be able to provide signal indicative of velocity (Column 12, Lines 7-10).

As to Claim 7,

Becker discloses a sensor assembly (combination of (70) and (72)) including at least one magnet (72), the magnet disposed adjacent a magnetic field sensor ((70) / hall), and an activating member attached to a rail of an automobile seat rail system (Column 7, Lines 9-19), the magnetic field sensor providing a first output when the activating member is in a first position relative to the sensor assembly and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the magnet and the magnetic field sensor in either of the first and the second position ((Figures 2-5) and (Column 3, Lines 65-67) and (Column 4, Lines 1-54)).

Becker does not disclose a sensor assembly including at least one magnet having a C-shaped cross-section.

Birnbaum discloses a sensor assembly including at least one magnet having a C-shaped cross-section (Figure 5), the magnet disposed adjacent a magnetic field sensor (228), the sensor assembly mounted to a rail (Figure 5), an activating member ((202) and (202')), the magnetic field sensor providing a first output when the activating member is in a first position relative to the sensor assembly, and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the magnet and the magnetic field sensor in either of the first and the second position ((Figure 5) and (Column 9, Lines 19-67) and (Column 10, Lines 1-16) and (Column 11, Lines 33-67) and (Column 12, Lines 1-2)).

It would have been obvious to a person of ordinary skill in the art to modify Becker to include a sensor assembly including at least one magnet having a C-shaped cross-section given the above disclosure and teaching of Birnbaum in order to provide a new and improved detector which is simplified and economical (Column 2, Lines 58-60) and to be able to provide signal indicative of velocity (Column 12, Lines 7-10).

As to Claim 8,

Becker discloses the sensor assembly (combination of (70) and (72)) is mounted on a first rail of an automobile seat rail system ((Figure 2) and (Column 2, Lines 48-53) and (Column 3, Lines 41-46)), and the activating member is a second rail of the automobile seat rail system ((Column 2, Lines 66-67) and (Column 3, Lines 65-67) and

(Column 4, Lines 20-32) and (Column 4, Lines 45-54) and (Column 5, Lines 9-10) and (Figures 2-5)).

As to Claim 11,

Becker discloses a seat rail system (Figure 2) including a movable rail (48) and a stationary rail (32), a sensor assembly (combination of (70) and (72)) including at least one magnet (72) and a Hall device (70), the sensor assembly being mounted to a first of the movable rail and the stationary rail, and the Hall device providing a first output when the movable rail is in a first position relative to the stationary rail a second output when the movable rail is in a second position relative to the stationary rail, the second of the movable rail and the stationary rail not extending between the at least one magnet and the Hall device in either of the first position and second position ((Figures 2-5) and (Column 3, Lines 65-67) and (Column 4, Lines 1-54)).

Becker does not disclose a sensor assembly including at least one C-shaped magnet.

Birnbaum discloses a sensor assembly including at least one C-shaped magnet (Figure 5), and a magnetic field sensor (228), the sensor assembly mounted to a rail (Figure 5), an activating member ((202) and (202')), the magnetic field sensor providing a first output when the activating member is in a first position relative to the sensor assembly, and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the magnet and the magnetic field sensor in either of the first and the second position

((Figure 5) and (Column 9, Lines 19-67) and (Column 10, Lines 1-16) and (Column 11, Lines 33-67) and (Column 12, Lines 1-2)).

It would have been obvious to a person of ordinary skill in the art to modify Becker to include a sensor assembly including at least one C-shaped magnet given the above disclosure and teaching of Birnbaum in order to provide a new and improved detector which is simplified and economical (Column 2, Lines 58-60) and to be able to provide signal indicative of velocity (Column 12, Lines 7-10).

As to Claim 13,

Becker discloses the sensor assembly is mounted to the stationary rail (32) / T-shaped guide member) ((Figure 2) and (Column 2, Lines 48-53) and (Column 3, Lines 41-46)).

As to Claim 14,

Becker discloses the sensor assembly (combination of (70) and (72)) is mounted to one of the movable rail (48) and the stationary rail (32) via a mounting bracket ((Figure 2) and (Column 2, Lines 48-53) and (Column 3, Lines 41-46)).

As to Claim 17,

Becker discloses one of the movable rail (48) and stationary rail (32) comprises an activating member (48), the activating member being in a first activating position relative to the sensor assembly when the movable rail is in the first position relative to the stationary rail, and the activating member being in a second activating position relative to the sensor assembly when the movable rail is in the second position relative to the stationary rail, the activating member not extending between the at least one

magnet and the Hall device in either of the first and second activating positions ((Figures 2-5) and (Column 3, Lines 65-67) and (Column 4, Lines 1-54)).

As to Claim 18,

Becker discloses providing a sensor assembly (combination of (70) and (72)) including at least one magnet (72) and a Hall device (70), mounting the sensor assembly to a first seat rail (32) ((Figure 2) and (Column 2, Lines 48-53) and (Column 3, Lines 41-46)), the Hall device providing an output, the output being a first output when the sensor assembly is in a first position relative to a second seat rail and the output being a second output when the sensor assembly is in a second position relative to the second seat rail, the second seat rail not extending between the at least one magnet and the Hall device in either of the first and second positions ((Figures 2-5) and (Column 3, Lines 65-67) and (Column 4, Lines 1-54)), and determining a position of the seat in response to the output ((Column 5, Lines 20-27) and (Column 5, Lines 46-52)).

Becker does not disclose providing a sensor assembly including at least one C-shaped magnet.

Birnbaum discloses providing a sensor assembly including at least one C-shaped magnet (Figure 5) and a magnetic field sensor (228), the sensor assembly mounted to a rail (Figure 5), an activating member ((202) and (202')), the magnetic field sensor providing a first output when the activating member is in a first position relative to the sensor assembly, and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the magnet and the magnetic field sensor in either of the first and the second position

((Figure 5) and (Column 9, Lines 19-67) and (Column 10, Lines 1-16) and (Column 11, Lines 33-67) and (Column 12, Lines 1-2)).

It would have been obvious to a person of ordinary skill in the art to modify Becker to include providing a sensor assembly including at least one C-shaped magnet given the above disclosure and teaching of Birnbaum in order to provide a new and improved detector which is simplified and economical (Column 2, Lines 58-60) and to be able to provide signal indicative of velocity (Column 12, Lines 7-10).

As to Claim 19,

Becker discloses mounting an activating member (a member constructed of ferromagnetic material) to the second seat rail (Column 7, Lines 9-19), the Hall device providing a first output when the activating member is in a first position relative to the sensor assembly and a second output when the activating member is in a second position relative to the sensor assembly, the activating member not extending between the at least one magnet and the Hall device in either of the first and second position of the activating member ((Figures 2-5) and (Column 3, Lines 65-67) and (Column 4, Lines 1-54)).

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. (herein referred to as "Becker") (6,095,555) in view of Birnbaum (4,236,903) and in further view of Tokunaga et al. (6,683,544).

Becker in view of Birnbaum discloses as explained above.

Becker in view of Birnbaum does not disclose the sensor assembly is mounted to the movable rail.

Tokunaga et al. discloses the sensor assembly is mounted to the movable rail ((Figure 7) and (Column 5, Lines 37-42) and (Column 5, Lines 54-60)).

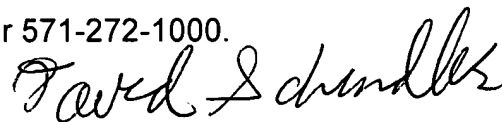
It would have been obvious at the time of the invention to modify Becker in view of Birnbaum to include the sensor assembly is mounted directly to the movable rail as taught by Tokunaga et al. in order to detect the position of a seat of an automobile (Column 1, Lines 6-9).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Schindler whose telephone number is (571) 272-2112. The examiner can normally be reached on M-F (8:00 - 5:00).

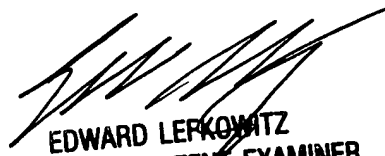
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Schindler
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